

Listing of Claims:

Claim 1 (currently amended) A flowable materials container comprising:

a first sidewall and a second sidewall sealed together along a peripheral seam to define a fluid chamber, at least one of the first and second sidewall is a film having at least one layer of a blend composed solely of ~~having~~ a first component and a second component, the first component selected from the group consisting of (1) a single ethylene and α -olefin copolymer containing more ethylene than α -olefin and having a density of less than about 0.915 g/cc, and (2) ionomers, the first component being present in an amount from about 99% to about 55% by weight of the blend, the second component present in an amount by weight of the blend from about 45% to about 1% and selected from the group consisting of (1) propylene containing polymers, (2) polybutene polymers, (3) polymethylpentene polymers, (4) cyclic olefin containing polymers and (5) bridged polycyclic hydrocarbon containing polymers; and,

the film has a modulus of elasticity when measured in accordance with ASTM D882 of less than about 60,000 psi, an internal haze when measured in accordance with ASTM D1003 of less than about 25%, an internal adhesion ranking of greater than about 2, a sample creep at 120°C under 27 psi loading of less than or equal to 150% for a film having a thickness of from about 5 mils to about 15 mils, and the film can be heat sealed into a container having seals wherein the seals remain intact when the container is autoclaved at 121°C for one hour.

Claim 2 (previously presented) The container of claim 1 wherein the second component is a propylene containing polymer and is selected from the group consisting of homopolymers of polypropylene, and random and block copolymers and random and block terpolymers of propylene with one or more comonomers selected from α -olefins having from about 2 to about 17 carbons.

Claim 3 (previously presented) The container of claim 2 wherein the second component is a propylene and ethylene copolymer having an ethylene content of from 1-6% by weight of the copolymer.

Claim 4 (original) The container of claim 2 wherein the second component is a blend of a first propylene containing polymer and a second propylene containing polymer.

Claim 5 (original) The container of claim 4 wherein the first propylene containing polymer has a first melt flow rate and the second propylene containing polymer has a second melt flow rate wherein the first melt flow rate is about 3 times greater than the second melt flow rate.

Claim 6 (original) The container of claim 4 wherein the first propylene containing polymer has a first melt flow rate wherein the first melt flow rate is about 5 times greater than the second melt flow rate.

Claim 7 (original) The container of claim 4 wherein the first propylene containing polymer has a first melting point temperature and the second propylene containing polymer has a second melting point temperature wherein the first melting point temperature is higher than the second melting point temperature by at least about 5°C.

Claim 8 (original) The container of claim 4 wherein the first propylene containing polymer has a first melting point temperature and the second propylene containing polymer has a second melting point temperature wherein the first melting point temperature is higher than the second melting point temperature by at least 10°C.

Claim 9 (previously presented) The container of claim 1 wherein the second component is a cyclic olefin containing polymer having from 5 to about 10 carbons in the ring.

Claim 10 (previously presented) The container of claim 9 wherein the cyclic olefin containing polymer is selected from the group consisting of substituted and unsubstituted cyclopentene, cyclopentadiene, cyclohexene, cyclohexadiene, cycloheptene, cycloheptadiene, cyclooctene, and cyclooctadiene.

Claim 11 (previously presented) The container of claim 1 wherein the second component is a bridged polycyclic hydrocarbon containing polymer having at least 7 carbons.

Claim 12 (canceled)

Claim 13 (original) The container of claim 1 wherein the first component is an ethylene and α -olefin copolymer wherein the α -olefin has from 3 to 17 carbons.

Claim 14 (original) The container of claim 1 wherein the first component is an ethylene and α -olefin copolymer wherein the α -olefin has from 4 to 8 carbons.

Claim 15 (original) The container of claim 14 wherein the ethylene and α -olefin copolymer is obtained using a single site catalyst.

Claim 16 (previously presented) The container of claim 1 wherein the layer is an irradiated layer.

Claim 17 (original) The container of claim 1 further comprising a peelable seal dividing the container into a first and a second chamber.

Claim 18 (original) The container of claim 17 wherein the peelable seal extends between lateral edges of the container.

Claim 19 (original) The container of claim 17 wherein the peelable seal extends between end edges of the container.

Claim 20 (original) The container of claim 17 wherein the peelable seal does not intersect the peripheral seal of the container.

Claim 21 (currently amended) A flowable materials container comprising:
a first sidewall and a second sidewall sealed together along a peripheral seam to define a fluid chamber, at least one of the first and second sidewall is a film having at least one irradiated layer of a blend composed solely of ~~having~~ a first component and a second component, the first component selected from the group consisting of (1) a single ethylene and α -olefin copolymer containing more ethylene than α -olefin and having a density of less than about 0.915 g/cc, and (2) ionomers, the first component being present in an amount from about 99% to about 55% by weight of the blend, the second component present in an amount by weight of the blend from about 45% to about 1% and selected from the group consisting of (1) propylene containing

polymers, (2) polybutene polymers, (3) polymethylpentene polymers, (4) cyclic olefin containing polymers and (5) bridged polycyclic hydrocarbon containing polymers.

Claim 22 (original) The container of claim 21 wherein the film has a modulus of elasticity when measured in accordance with ASTM D882 of less than about 60,000 psi, an internal haze when measured in accordance with ASTM D1003 of less than about 25%, an internal adhesion ranking of greater than about 2, a sample creep at 120°C under 27 psi loading of less than or equal to 150% for a film having a thickness of from about 5 mils to about 15 mils, and the film can be heat sealed into a container having seals wherein the seals remain intact when the container is autoclaved at 121°C for one hour.

Claim 23 (previously presented) The container of claim 21 wherein the blend is exposed to an oxygen partial pressure less than ambient conditions when exposed to the electron beam radiation.

Claim 24 (previously presented) The container of claim 21 wherein the second component is a propylene containing polymer and is selected from the group consisting of homopolymers of polypropylene, and random and block copolymers and random and block terpolymers of propylene with one or more comonomers selected from α -olefins having from about 2 to about 17 carbons.

Claim 25 (previously presented) The container of claim 21 wherein the second component is a propylene and ethylene copolymer having an ethylene content of from 1-6% by weight of the copolymer.

Claim 26 (original) The container of claim 21 wherein the second component is a blend of a first propylene containing polymer and a second propylene containing polymer.

Claim 27 (original) The container of claim 26 wherein the first propylene containing polymer has a first melt flow rate and the second propylene containing polymer has a second melt flow rate wherein the first melt flow rate is about 3 times greater than the second melt flow rate.

Claim 28 (original) The container of claim 26 wherein the first propylene containing polymer has a first melt flow rate and the second propylene containing polymer has a second melt flow rate wherein the first melt flow rate is about 5 times greater than the second melt flow rate.

Claim 29 (original) The container of claim 26 wherein the first propylene containing polymer has a first melting point temperature and the second propylene containing polymer has a second melting point temperature wherein the first melting point temperature is higher than the second melting point temperature by at least about 5°C.

Claim 30 (original) The container of claim 26 wherein the first propylene containing polymer has a first melting point temperature and the second propylene containing polymer has a second melting point temperature wherein the first melting point temperature is higher than the second melting point temperature by at least about 10°C.

Claim 31 (currently amended) The container of claim 21 wherein the second component is a cyclic olefin containing ~~container~~ polymer having from 5 to about 10 carbons in the ring.

Claim 32 (original) The container of claim 31 wherein the cyclic olefin is selected from the group consisting of substituted and unsubstituted cyclopentene, cyclopentadiene, cyclohexene, cyclohexadiene, cycloheptene, cycloheptadiene, cyclooctene, and cyclooctadiene.

Claim 33 (previously presented) The container of claim 21 wherein the second component is a bridged polycyclic hydrocarbon containing polymer having at least 7 carbons.

Claim 34 (canceled)

Claim 35 (previously presented) The container of claim 21 wherein the first component is an ethylene and α -olefin copolymer having from 3 to 17 carbons.

Claim 36 (original) The container of claim 21 wherein the first component is an ethylene and α -olefin copolymer wherein the α -olefin has from 4 to 8 carbons.

Claim 37 (original) The container of claim 35 wherein the ethylene and the α -olefin copolymer is obtained using a single site catalyst.

Claim 38 (original) The container of claim 21 further comprising a peelable seal dividing the container into a first chamber and a second chamber.

Claim 39 (original) The container of claim 38 wherein the peelable seal extends between lateral edges of the container.

Claim 40 (original) The container of claim 38 wherein the peelable seal extends between end edges of the container.

Claim 41 (original) The container of claim 38 wherein the peelable seal does not intersect the peripheral seal of the container.

Claims 42-44 (canceled)